

COMMUNICATION DEVICE

ABSTRACT OF THE DISCLOSURE

5 A direct sequence spread spectrum (DSSS) receiver (100) consistent with
certain embodiments has a frequency generator (112) that generates a local oscillator
signal without use of a piezoelectric crystal. A frequency converter (108) receives the
local oscillator signal and mixes the local oscillator signal with a received DSSS
10 signal to produce a down-converted signal. The received DSSS signal is encoded
using a first set of DSSS code. A differential chip detector (116) receives the down-
converted signal and converts the down-converted signal to a differentially detected
signal. A correlator (120) receives the differentially detected signal and correlates the
detected signal with a set of DSSS codes that are time-shifted from the first set of
15 DSSS codes. This abstract is not to be considered limiting, since other embodiments
may deviate from the features described in this abstract.